APPENDIX.

EXUDATION AND LIQUEFACTION TEST FOR BLASTING GELATINE, GELATINE DYNAMITE, AND ANALOGOUS PREPARATIONS.

Test for Liquefaction.

A cylinder of blasting gelatine is to be cut from the cartridge to be tested, the length of the cylinder to be about equal to its diameter and the ends being cut flat.

The cylinder is to be placed on end on a flat surface without any wrapper, and secured by a pin passing vertically through its centre.

In this condition the cylinder is to be exposed for one hundred and forty-four (144) consecutive hours (six days and nights) to a temperature ranging from 85° to 90° Fahr. (inclusive), and during such exposure the cylinder shall not diminish in height by more than one-fourth of its original height, and the upper cut surface shall retain its flatness and the sharpness of its edge.

N.B.—If the blasting gelatine and the gelatine dynamite to be tested be not made up in a cylindrical form, the above test is to be applied with the necessary modifications.

Test for Liability to Exudation.

There shall be no separation from the general mass of the blasting gelatine or gelatine dynamite of a substance of less consistency than the bulk of the remaining portion of the materials under any conditions of storage, transport, or use, or when the material is subjected three times in succession to alternate freezing and thawing, or when subjected to the liquefaction test hereinbefore described. (G. I., H. D., Notn. No. 1394, dated 8th July 1897, *vide* G. N. No. 5283, dated 14 idem.)

3. In supersession of Government Notification No. 9724, dated 24th December 1889, and in exercise of the powers conferred by Section 5 of the Indian Explosives Act, IV of 1884, and with the previous sanction of the Governor General in Council, His Excellency the Governor in Council is pleased to make the following rules to regulate the transport of explosives within the limits of the Port of Bombay :—

Rules.

Rules 1, 2, 3, 4, 5 and 7 to regulate the transport of explosives made by the Governor General in Council and published under Government of India Notifications Nos. 1393 and 1394, dated 8th July 1897, and Government of Bombay Notification No. 5283, dated 14th idem, shall, subject to the following rules, apply to the transport of explosives within the limits of the port of Bombay :—

Rule (*a*).—The Master of any vessel arriving with explosives exceeding in weight 100 lbs. on board as cargo shall give notice thereof to the Pilot immediately on his boarding.

Rule (*b*).—No sea-going vessel having explosives on board in excess of 100 lbs. weight, excepting *explosives of Division I* of the Ammunition class* (*class 6*) shall carry the same nearer to the shipping or city of Bombay than one mile eastward of the Middle Ground Battery, and no vessel shall within such limits take on board from any other vessel more than 100 lbs. weight of explosives or such quantity as with explosives already on board would exceed in weight 100 lbs. excepting *explosives of Division I* of the Ammunition class* (*class 6*).

Rule (*c*).—Every sea-going vessel having more than 100 lbs. of explosives on board, excepting *explosives of Division I* of the Ammunition class* (*class 6*) shall carry during the day a square red flag at the fore truck and at night a red light in the same place in addition to the Regulation lights, and every vessel or boat used in transporting explosives, excepting as aforesaid, in the port of Bombay, shall exhibit on a board or otherwise the word "Explosives" painted in white letters a foot long on a black ground on each side of the vessel or boat above the water line. Vessels and boats employed in landing or shipping explosives, and having on board more than 100 lbs. explosives, excepting as aforesaid, when required to remain at anchor, shall anchor to the eastward of the shipping and not nearer to any of the shipping than half a mile to the east thereof.

Rule (*d*).—The consignee, agent or other person concerned shall give written notice 48 hours before the expected arrival of any vessel having explosives in excess of 100 lbs. weight on board, excepting *explosives of Division* I of the Ammunition class* (*class 6*) or before shipment of any such explosives, to the Port Officer and the Superintendent of Water Police, and the latter shall depute a special officer to remain in charge of such explosives until the same have been deposited in the magazine, or the vessel carrying the same proceeds to sea.

Rule (*e*).—The amount of explosives conveyed in any one vessel or boat at any one time shall not exceed 560 lbs. unless the vessel or boat has a closed deck approved by the Port Officer.

No decked boat or vessel shall carry more than 50 tons of explosives at one time. This rule does not apply to sea-going vessels.

Rule (*f*).—The Port Officer is authorized, on occasions when he may deem expedient, to permit ammunition when properly packed in cases, when such cases do not exceed fifty in number, to be shipped on board a vessel lying at the ordinary anchorage

* Division 1.—Safety cartridge, safety fuzes for blasting, railway fog signals, percussion caps, fuzes for shells, and tubes friction for guns, provided that there be no more than 5 fuzes or 25 tubes in one package, and that the package be a hermetically sealed metal cylinder.

on the day or the day before such vessel is intended to sail. Shipments shall be effected under the same precautions and conditions as are prescribed in these rules. Ammunition permitted to be shipped under this rule must be taken in immediately on the boat going alongside, and no cargo boat or other vessel having fire on board shall be permitted to lie on the same side of the vessel during the time of such shipment.

Rule (*g*).—If any person commits a breach of any of the foregoing rules (*a*) to (*f*) he shall be *liable to a* fine which may extend to one thousand rupees.

(G. N. No. 9270, dated 22nd December 1897.)

4. In exercise of the powers conferred by Section 5 of the Indian Explosives Act IV of 1884, the Governor of Bombay in Council is pleased, with the previous sanction of the Governor General in Council, to make the following rules to regulate the transport of explosives within the limits of the port of Karáchi :—

Rules.

Rules 1, 2, 3, 4, 5 and 7 to regulate the transport of explosives made by the Governor General in Council and published under Government of India Notification No. 1417, dated the 24th June 1887, and Government of Bombay Notification No. 3956, dated the 29th June 1887, shall, subject to the following rules, apply to the transport of explosives within the limits of the port of Karáchi :

Rule (*a*).—The master of any vessel arriving with explosives exceeding 100 lbs. in weight on board as cargo shall give notice thereof to the pilot immediately on his boarding.

Rule (*b*).—No sea-going vessel having gunpowder or other explosives in excess of 100 lbs. weight on board entering the port of Karáchi shall proceed, during the prevalence of the south-west monsoon *i.e.*, in the interval between the 15th day of May and the 30th day of September (both days inclusive) farther than No. 5 Manora Swinging Mooring, or at any other season of the year, farther than the Deep Water Point Moorings, until such excess quantity has been discharged and deposited in the Port Department Magazine erected on the spit between the Island of Baba and the Quarantine Buildings, or such other place as Government may direct, and no vessel shall take on board within the above limits any quantity in excess of the 100 lbs. above mentioned. G. N. No. 3752 dated 3rd June 1891.

Rule (*c*).—When receiving or delivering such gunpowder or other explosives, the master of any vessel is to see that the platform in the vessel's hold, the gangways and combings of the hatchways are covered with tanned hides or other suitable paddings, that the barrels or boxes are carefully stowed and the hatches properly secured and

locked, and that the key remains in his own possession.

Rule (*d*).—A cushion (stuffed with white oakum) covered with leather is to be used for landing all such powder barrels or cases upon, whether in the hold of the vessel, in the boats, or on the wharf, when landing or discharging powder or other explosives.

Rule (*e*).—After the vessel has been discharged, the hides, hair-cloths, &c., are to be removed and the hold carefully cleaned out.

Every such vessel as last aforesaid when at anchor at night in the road-stead, or in the track of shipping, is to show a mast-head light, and every such vessel when under weigh at night is to show side-lights according to the Admiralty Regulations.

Rule (*f*).—Barges, lighters, boats and vessels carrying such gunpowder or other explosives, shall not when at anchor lie closer than half a mile from any of the shipping or public landing places.

G. N. No. 163, dated 11th January 1899.

Rule (*g*).—Every sea-going vessel having more than 100 lbs. of explosives on board excepting explosives of Division I* of the Ammunition class (class 6) shall carry during the day a square red flag at the fore truck and at night a red light in the same place in addition to the regulation lights. The master and all the crew are to remain on board until the gunpowder or other explosive stores are discharged, unless it be necessary to procure water or provisions, in which case notice is to be given to the Port Officer, but the vessel is not to be left without an officer on board.

Rule (*h*).—Vessels, barges and boats having or taking on board such gunpowder or other explosives, are to be kept scrupulously clean and free from loose gunpowder.

Rule (*i*).—In shipping or discharging such gunpowder or other explosives tanned hides or wadmiltilts are to be laid down in that portion of the vessel over which the cases or barrels pass.

Rule (*j*).—All boats laden with such gunpowder or other explosives are to remain at anchor off the magazine above-mentioned until orders are received to land the same.

Rule (*k*).—Only decked boats with closed-in hatches under lock and key (the latter to remain in charge of the official deputed to superintend the discharge of the gunpowder or other explosives) are to be employed for the conveyance of gunpowder or other explosives, and they are to have a moveable board attached to the bow and stern a foot long with the word "Explosives"

* Division I.—Safety cartridges, safety fuzes for blasting, railway fog signals, percussion caps, fuzes for shells, and tubes friction for guns, provided that there be no more than 5 fuzes or 25 tubes in one package, and that the package be a hermetically sealed metal cylinder.

painted in white letters on a black ground, and a red flag is to be kept hoisted during the time any such gunpowder or other explosives are on board.

Rule (*l*).—The consignee, agent or other person concerned shall give written notice, twenty-four hours before the expected arrival or intended shipment of any such explosives, to the Port Officer, who shall depute an officer to remain in charge of such explosives until the same have been deposited in the magazine or stowed on board any vessel conveying it elsewhere.

Rule (*m*).—The Port Officer is authorized on occasions when he may deem it expedient to permit ammunition properly packed in cases, when such cases do not exceed 50 in number, to be shipped on board a vessel lying at the ordinary anchorage on the day or the day before such vessel is intended to sail. Shipment shall be effected under the same precautions and conditions as are prescribed in the rules for the shipment of explosives on board vessels lying off the Deep Water Point Moorings. Ammunition permitted to be shipped under this rule must be taken in immediately on the boat going alongside, and no cargo-boat or other vessel having fire on board shall be permitted to lie on the same side of the vessel during the time of such shipment.

Rule (*n*).—If any person commits a breach of any of the foregoing rules (*a*) to (*m*), he shall be punished with fine which may extend to one thousand rupees.

Rule (o_1).—The following explosives are exempted under Section 5 (2) (*f*) from the operation of the above rules:— G. N. No. 6590, dated 18th September 1890.

Safety fuze; safety cartridges; percussion caps.

Rule (o_2).—The following explosives are exempted from the operation of the foregoing rules and of Rules 1, 2, 3, 4, 5 and 7 of the above mentioned rules of the Governor General in Council so far as regards the limits of the port of Karáchi, *viz.*, G. N. No. 7164, dated 2nd October 1893.

1 railway fog signals.

2 fire works.

(G. N. No. 9724 A, dated 24th December 1889.)

5. In exercise of the powers conferred by Section 5 of the Indian Explosives Act IV of 1884, the Governor of Bombay in Council is pleased, with the previous sanction of the Governor General in Council, to make the following rules to regulate the transport of explosives within the limits of the port of Aden:—

Rules.

Rules 1, 2, 3, 4, 5 and 7 to regulate the transport of explosives made by the Governor General in Council and published under Government of India Notification No. 1417, dated the 24th June 1887. and Government of Bombay Notification No. 3956,

dated the 29th June 1887, shall, subject to the following rules, apply to the transport of explosives within the limits of the port of Aden:

Rule (*a*).—The master of any vessel arriving with explosives exceeding in weight 100 lbs. on board as cargo shall give notice thereof to the pilot immediately on his boarding, but if any vessel is not boarded by a pilot it should display a distinguishing flag by day and a light by night.

G. N. No. 163 A, dated 11th January 1899.

Rule (*b*).—No sea-going vessel having explosives in excess of 100 lbs. weight on board intended to be discharged, moved or exposed in any way shall enter the inner harbour or anchor within 800 yards of the light ship or 600 yards of the nearest vessel, and no vessel or boat shall within the inner harbour or 800 yards of the light ship take on board from any other vessel or boat explosives exceeding 100 lbs. in weight. Every sea-going vessel having more than 100 lbs. of explosives on board excepting explosives of Division-I* of the Ammunition class (class 6) shall carry during the day a square red flag at the fore truck and at night a red light in the same place, in addition to the regulation lights.

Rule (*c*).—Explosives brought to Aden for the use of Government may be landed at the Pier of Obstruction or at the Pilots' Bandar at Steamer Point and deposited in the magazines belonging to Government. Government consignees must send a properly qualified person to take delivery from the ship.

Rule (*d*).—Explosives brought to Aden on regular licenses for local consumption shall be landed at the Pilots' Bandar, and deposited in the Port Magazine until cleared in accordance with the license.

Rule (*e*).—Explosives brought to Aden for transhipment shall, if there is not sufficient accommodation in the Port Magazine, be discharged and deposited in decked boats with closed hatches; such boats shall lie at anchor at least 600 yards north from No. 14 Buoy in bad weather, and 600 yards north from the Lightship in fine weather, and shall keep a red flag flying until the cargo is transhipped on regular licenses. If such consignment can be stored in the Port Magazine, it shall be landed at the Pilots' Bandar and deposited in the Port Magazine until transhipped on regular licenses.

Rule (*f*).—No boats shall be used for the conveyance or deposit of explosives excepting decked boats approved by the Port Officer, with closed hatches under lock and key, and they shall have the word "Explosive" in white letters a foot long painted on a black ground on each side of the boat

* Division I.—Safety cartridges, safety fuzes for blasting, railway for signals, percussion caps, fuzes for shells, and tubes friction for guns, provided that there be no more than 5 fuzes or 25 tubes in one package, and that the package be a hermetically sealed metal cylinder.

above the water line and shall keep a red flag hoisted during the time any such explosives are on board, provided that safety cartridges not exceeding 4,000 in quantity may be landed in such manner as the Port Officer may direct, and shall be deposited in accordance with rule (*d*).

Rule (*g*).—All boats laden with explosives, when required to remain at anchor, shall lie in bad weather at least 600 yards north from No. 14 Buoy and in fine weather at least 600 yards north from the Lightship.

Rule (*h*).—The consignee, agent, or other person concerned in the explosives described in Rule (*e*) shall, within one hour after the arrival of the vessel, give written notice to the Port Officer and the Assistant Resident in charge Police and A'bkári, and the last-named officer shall depute a special officer to remain in charge of such explosives until the same has been transhipped.

Rule (*i*).—The Port Officer is authorized, on occasions when he may deem it expedient, to permit ammunition properly packed in cases, when such cases do not exceed fifty in number, to be shipped on board a vessel lying at the ordinary anchorage in the Inner Harbour on the day or day before such vessel is intended to sail; ammunition permitted to be shipped under this rule must be taken in immediately on the boat going alongside, and no cargo boat or other vessel having fire on board shall be permitted to lie in the vicinity of the vessel during the time of such shipment. All fires and lights on deck must be put out one hour before any explosives are taken on board or discharged, and the fires of the main boilers must be banked unless ordered to be put out.

Rule (*j*).—If any person commits a breach of any of the foregoing rules (*a*) to (*i*) he shall be punished with fine which may extend to one thousand rupees.

(G. N. No. 9724 B, dated 24th December 1889.)

6. The Chemical Analyser to Government is authorized to grant the certificates referred to in clause IX of Rule 6 of the rules published in the Notification of the Government of India No. 1417,* dated 24th June 1887, he being the officer qualified to certify to the purity of explosives and to pronounce an opinion upon the question of their deterioration. (G. R. No. 4516, dated 9th July 1888.)

*Superseded by the Notn. of the G. of I., No. 1393, dated 8th July 1897. (Bo. Govt. Notn. No. 5283, dated 14th idem.)

7. The Railway Administrations may refuse to receive for conveyance any consignment of explosives until they have satisfied themselves that the certificate referred to in Rule 6 (XI) of the Government of India Notification No. 1417,† dated 24th June 1887, tendered therewith, actually refers to that consignment and otherwise satisfies the conditions laid down in the rules. (G. R. No. 3803, dated 26th May 1893.)

†Ditto.

8. The Port Trustees, as Conservators of the Port of Bombay, should undertake the conduct of

prosecutions in cases of breaches of the rules applying to the transport of explosives within the port of Bombay published in Government Notification No. 9724,* dated 24th December 1889. (G. Rs. Nos. 4396, dated 23rd June 1890, and 4860, dated 14th July 1890.)

*Superseded by G. N. No. 9270, dated 22nd December 1897.

9. As all explosives which are the property of Government are exempted from the operations of the Indian Explosives Act, 1884, no rules under it can be framed which could apply to such explosives. In the opinion of the Government of India, it would be better that Government Departments should follow the local rules for regulating the transport of explosives within each port than that special rules for Government explosives generally applicable to the whole of British India should be prescribed. The local rules which should be observed in the transport of explosives within the limits of the ports of Bombay, Aden and Karáchi are those sanctioned in Home Department letter No. 2322,† dated 6th December 1889. (G. I., H. D., No. 1406, dated 21st July 1890; *vide* G. Rs. Nos. 5583, dated 11th August 1890, and 7164, dated 2nd October 1890.)

10. The prescribed rules for the conveyance by rail of explosives and dangerous goods should be observed in respect of acids and similar dangerous articles consigned from England to Government Departments up-country. No exception should be made in this matter in favour of Government property. (G. R. No. 1612, dated 3rd March 1891.)

11. Carbolic acid is one of a large group of articles which come within the category of "Dangerous goods" and are apt to leak badly in railway transit. The rules of the G. I. P. Railway Company for the packing and conveyance of these goods lay down that the articles "must be contained in strong tins or in bottles corked and sealed, which must be enclosed in wooden boxes and securely packed in sawdust" so that they may be loaded in ordinary wagons. If they are not so packed, it is more than probable that other consignments in the same wagon will be spoiled and the Railway Company will be liable for damage to other goods. The Railway Company is, therefore, right in refusing to accept such articles except when packed as required by the rules, and the Governor in Council does not see that any case has been made out for the relaxation of those rules.

12. If the Commissariat Department desires to send drums of carbolic acid in their original English packing it might do so in special vans, but it is for that Department to consider which is the cheaper mode of transit.

(G. R. No. 6559, dated 13th August 1892.)

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‡Superseded by G. N. No. 9270, dated 22nd December 1897.

† *Vide* Government Notifications Nos. 9724,‡ 9724-A and 9724-B, dated 24th December 1889, *supra*.

II.—MANUFACTURE, POSSESSION AND SALE.

1. In supersession of Government Notification No. 4116, dated 5th July 1887, and in exercise of the powers conferred by Sections 5 and 7 of the Indian Explosives Act (IV of 1884) and with the previous sanction of the Governor General in Council, His Excellency the Governor in Council is pleased to make the following rules to regulate the manufacture, possession and sale of explosives in the Presidency of Bombay.

Nothing in these rules relating to the possession of explosive shall apply in any port, as defined in the Indian Ports Act, 1889, for which the Local Government may have made, or may make, special rules under the Indian Explosives Act (IV of 1884) to regulate the possession of explosive.

Nothing in these rules shall apply to the manufacture, possession or sale of any explosive—

(*a*) by order of the Government, or

(*b*) by any person employed under the Government in the execution of the Indian Explosives Act (IV of 1884), or as a keeper of a magazine, artizan, soldier, sailor, policeman, or otherwise, or enrolled as a Volunteer under the Indian Volunteers Act (XX of 1869), in the course of his employment or duty as such.

Rules under the Explosives Act, 1884, for the Manufacture, Possession and Sale of Explosives in the Presidency of Bombay.

PRELIMINARY.

[Rule 1 is identical with Rule 1 under the Transport and Import Rules.]

MANUFACTURE, POSSESSION, AND SALE.

(*a*) *General Rules.*

2. An explosive shall not be manufactured except under and in accordance with the conditions of a license to manufacture the explosive granted under these rules :

Provided that this rule shall not apply—

(*a*) to the making of a small quantity of an explosive for the purpose of chemical experiment, and not for practical use or for sale ; or

(*b*) to the filling for private use, and not for sale, of any safety cartridges to the amount allowed by these rules to be possessed for private use.

3. Whoever manufactures an explosive in contravention of Rule 2, he shall be punishable with fine which may extend to three thousand rupees.

4. An explosive shall not be possessed except under, and in accordance with, the conditions of a license to possess the explosive granted under these rules :

Provided that this rule shall not apply—

(1) to a person possessing for his private use and not for sale—